*CLAIM AMENDMENTS*

1. (Currently Amended) A distance measuring device, comprising:

light projecting means for projecting ~~a~~ light onto an object at a distance to be measured;

light ~~receiving~~ detecting means for ~~receiving~~ detecting light of the light projected to and reflected ~~by~~ from the object and outputting a first signal corresponding to the distance to the object;

integration means comprising an integration capacitor, ~~and~~ for integrating ~~said~~ the first signal by charging said integration capacitor according to ~~said~~ the first signal;

~~AD~~ analog-to-digital (AD) conversion means for converting the voltage of said integration capacitor, after ~~having performed~~ a predetermined number of distance measuring routines, including light projection by said light projecting means, light ~~reception~~ detection by said light ~~receiving~~ detecting means and charging of said integration capacitor ~~in the state of~~ from a predetermined initial voltage level, into a digital signal as a second signal; and

distance determination means for determining the distance to the object based on ~~said~~ the second signal, wherein the predetermined number of ~~said~~ the distance measuring routines to be performed is set ~~at the number by which~~ so said integration capacitor ~~in the state of~~, from the initial voltage level, substantially reaches ~~the~~ a saturation voltage level of said integration capacitor ~~in case where said~~ when the distance measuring routines are performed ~~on the condition that~~, when the object is ~~placed~~ located at a short-range alarm position.

2. (Currently Amended) A distance measuring device, comprising:

light projecting means for projecting ~~a~~ light onto an object at a distance to be measured;

light ~~receiving~~ detecting means for ~~receiving~~ detecting light of the light projected to and reflected ~~by~~ from the object and outputting a first signal corresponding to the distance to the object;

integration means comprising an integration capacitor, ~~and~~ for integrating ~~said~~ the first signal by discharging said integration capacitor according to ~~said~~ the first signal;

~~AD~~ analog-to-digital (AD) conversion means for converting the voltage of said integration capacitor, after ~~having performed~~ a predetermined number of distance measuring routines, including light projection by said light projecting means, light ~~reception~~ detection by said light ~~receiving~~ detecting means and discharging of said integration capacitor ~~in the state of~~ from a predetermined initial voltage level, into a digital signal as a second signal; and

distance determination means for determining the distance to the object based on ~~said~~ the second signal, wherein the predetermined number of ~~said~~ the distance measuring routines to be performed is set ~~at the number by which~~ so said integration capacitor ~~in the state of~~ from the initial voltage level, substantially reaches ~~the~~ an uncharged state ~~in case where said~~ when the distance measuring routines are performed on the condition that the object is placed at a short-range alarm position.

3. (Currently Amended) The distance measuring device according to Claim 1, wherein

said distance measuring device is ~~for being~~ applied to a camera, and

~~said~~ the short-range alarm position is the position closest ~~distance away from~~ to said camera of an object capable of being photographed by said camera.

4. (Currently Amended) The distance measuring device according to Claim 2, wherein

said distance measuring device is ~~for being~~ applied to a camera, and

~~said~~ the short-range alarm position is the position closest ~~distance away from~~ to said camera of an object capable of being photographed by said camera.

5. (Currently Amended) The distance measuring device according to Claim 1, wherein

said distance measuring device is ~~for being~~ applied to a camera, and

~~said~~ the short-range alarm position is the nearest position that can be ~~brought into~~ made a focal point by said camera.

6. (Currently Amended) The distance measuring device according to Claim 2, wherein

said distance measuring device is ~~for being~~ applied to a camera, and

~~said~~ the short-range alarm position is the nearest position that can be ~~brought into~~ made a focal point by said camera.

7. (Currently Amended) The distance measuring device according to Claim 1, wherein

~~said~~ the distance measuring routine is repeated ~~predetermined~~ n times ~~on the condition that~~ when the object is placed at ~~a~~ the short-range alarm position, and then a value of the

second signal is obtained as AFDATA,

the number of ~~said~~ the distance measuring routines to be performed is determined by the following numerical equation~~;~~

$n_2=n\cdot ADMAX/AFDATA$,

provided that,

$n_2$~~:~~ is the number of ~~said~~ the distance measuring routines to be performed, and

ADMAX~~:~~ is a value of the second signal which is obtained when said integration capacitor is ~~in the state of~~ at the saturation voltage level.

8. (Currently Amended) The distance measuring device according to Claim 7, wherein

the voltage level of said integration capacitor increases as the object is placed closer to the distance measuring device,

the initial voltage level is an uncharged level, and

the saturation voltage level is a fully charged level.

9. (Currently Amended) The distance measuring device according to Claim 7, wherein the value of the second signal is proportional to the ~~charged amount~~ charge in said integration capacitor.

10. (Currently Amended) The distance measuring device according to Claim 2, wherein

~~said~~ the distance measuring routine is repeated ~~predetermined~~ n times ~~on the condition that~~ when the object is placed at ~~a~~ the short-range alarm position, and then a value of the second signal is obtained as AFDATA,

the number of ~~said~~ the distance measuring routines to be performed is determined by the following numerical equation~~;~~

$n_2=n\cdot ADMAX/(ADMAX-AFDATA)$,

provided that,

$n_2$~~:~~ is the number of ~~said~~ the distance measuring routines to be performed, and

ADMAX~~:~~ is a value of the second signal which is obtained when said integration capacitor is ~~in the state of~~ at the saturation voltage level.

11. (Currently Amended) The distance measuring device according to Claim 10, wherein

the voltage level of said integration capacitor decreases as the object is placed closer to the distance measuring device, and

the initial voltage level is a fully charged level.

12. (Original) The distance measuring device according to Claim 10, wherein the value of the second signal is proportional to the voltage of said integration capacitor.